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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,466	09/27/2001	Tsutomu Tamaki	030675-063	9568

7590 12/05/2003  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
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Alexandria, VA 22313-1404

EXAMINER

LEE, BENNY T

ART UNIT PAPER NUMBER

2817

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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FILED DATE FIRST NAMED INVENTOR ATTORNEY SOCKET NO.

EXAMINER

ART UNIT PAPER NUMBER

DATE MAILED

Not to be filled in by the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 16 Sept 2003 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire \_\_\_\_\_ month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-17 are pending in the application.  
Of the above, claims 3-14 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1, 2, 15-17 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☒ Claims 1-17 are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_, filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other \_\_\_\_\_

PTOL-320 (Rev. 9-89)

EXAMINER'S ACTION

SN 963466  
U.S.GPO:1990-259-282

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Claims 3-14 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

The disclosure is objected to because of the following informalities: Note that explicit detail descriptions of Fig. 8B should be respectively provided (e.g. including reference labels L1, L2, etc). Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ulian et al.

Ulian et al (Figs. 3a, 3b) disclose top and bottom substrates (30, 32), each of which comprises a circular region therein characterized as a “waveguide terminal” (especially when the region is arranged in conjunction with strip conductors (34, 36, 38) to define a waveguiding structure). Note that a “contact region” (i.e. 44, 44') is associated with the respective substrate and surrounds the corresponding circular region and electrically grounds a portion of the circular regions. An interconnect or “joint” member comprising solder points (60; 62<sub>1</sub>, 62<sub>2</sub>, ...) are

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arranged to “bond” or join together the substrates (30, 32) across the opposing contact regions by being sandwiched therebetween to thereby form to form a unitary connected structure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ulian et al.

Ulian et al discloses the claimed invention, as discussed above, in which the substrates (30, 32) are “bonded” to each other by soldering at solder points (60; 62<sub>1</sub>, 62<sub>2</sub>, ...), but does not disclose bonding of the substrates by conductive adhesive or thermocompression bonding.

Note that in figs. 2a, 2b, an alternative connecting joint member (50) is provided. Accordingly, in view of this alternative structure, obviously one of ordinary skill in the art would have recognized that such a structure would needed to have been bonded to substrates (30, 32) to provide a secured unitary structure. Therefore, in using such an embodiment as an alternative to the solder point arrangement, this would have suggested that any equivalent type of bonding (e.g. adhesive, thermal compression, etc) would have been usable therewith.

Applicant's arguments with respect to claims 1, 2, 15-17 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.

A handwritten signature in black ink, reading "Benny Lee". The signature is written in a cursive, flowing style. The first name "Benny" is written with a large, looped 'B' and the last name "Lee" is written with a large, looped 'L'.

BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

B. Lee

November 26, 2003